

General

Title

Brain and central nervous system (CNS) cancer: proportion of patients with glioma with an oligodendroglial component undergoing surgery where tissue sample is tested for 1p/19q within 21 days of surgery.

Source(s)

NHS Scotland, Scottish Cancer Taskforce. Brain and central nervous system cancer clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland; 2016 Jan. 39 p. [24 references]

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the proportion of patients with glioma with an oligodendroglial component undergoing surgery where tissue sample is tested for 1p/19q within 21 days of surgery.

This Cancer Quality Performance Indicator (QPI) measure is separated into two parts. Please refer to the related NQMC measure summary, [Brain and central nervous system \(CNS\) cancer: proportion of patients with glioblastomas undergoing surgery where tissue sample is assessed for the MGMT promoter hypermethylation status within 21 days of surgery](#).

Note from the National Quality Measures Clearinghouse: This measure is part of the QPIs collection. For more information, including a complete list of QPI measure sets, please visit the [Healthcare Improvement Scotland Web site](#) .

Rationale

Combined loss of 1p/19q in gliomas with an oligodendroglial component is associated with a more favourable response to therapy (chemotherapy or radiotherapy) and is associated with considerably better prognosis when compared to tumours with intact 1p/19q. As such, where indicated, 1p/19q analysis should be carried out to help determine treatment and provide information on predicted tumour response to therapy and prognosis (National Institute for Health and Care Excellence [NICE], 2006; Alberta Health Services, 2008).

Determination of O6-methylguanine-DNA methyltransferase (MGMT) promoter methylation status predicts response to therapy (chemotherapy or concomitant chemoradiotherapy) in glioblastomas and assists in determination of prognosis. As such, where indicated, MGMT promoter methylation analysis should be carried out to help determine treatment and provide information on predicted tumour response to therapy and prognosis (Alberta Health Services, 2010).

The group have added a 21 day timeframe to ensure that the molecular analysis is undertaken and reported before treatment takes place.

Evidence for Rationale

Alberta Health Services. Anaplastic astrocytomas and oligodendrogliomas. Edmonton (Alberta): Alberta Health Services; 2008.

Alberta Health Services. Glioblastoma. Edmonton (Alberta): Alberta Health Services; 2010.

National Institute for Health and Care Excellence (NICE). Improving outcomes for people with brain and other CNS tumours. London (UK): National Institute for Health and Care Excellence (NICE); 2006 Jun. 180 p. [3 references]

NHS Scotland, Scottish Cancer Taskforce. Brain and central nervous system cancer clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland; 2016 Jan. 39 p. [24 references]

Primary Health Components

Brain/central nervous system (CNS) cancer; glioma with oligodendroglial component; surgery; tissue sample

Denominator Description

All patients with glioma with an oligodendroglial component undergoing surgery

Numerator Description

Number of patients with glioma with an oligodendroglial component undergoing surgery where tissue sample is tested for 1p/19q within 21 days of surgery (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

The collection of data is piloted on a small number of patient records using a paper data collection form produced by the Information Services Division (ISD). The aim is to identify any anomalies or difficulties with data collection prior to full implementation. At least one NHS board in each Regional Cancer Network participates in the pilot.

Evidence for Extent of Measure Testing

NHS Scotland. National cancer quality performance indicators: overview of development process. Edinburgh (Scotland): NHS Scotland; 2012 Dec. 7 p.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Ambulatory Procedure/Imaging Center

Hospital Inpatient

Hospital Outpatient

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Unspecified

Target Population Age

Unspecified

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Timeliness

Data Collection for the Measure

Case Finding Period

Unspecified

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Therapeutic Intervention

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

All patients with glioma with an oligodendroglial* component undergoing surgery

*This includes:

Anaplastic oligodendroglioma (World Health Organisation [WHO] Grade III)

Oligoastrocytomas (WHO Grade II)

Anaplastic oligoastrocytoma (WHO Grade III)

Glioblastoma with an oligodendroglial component (WHO Grade IV)

Exclusions

None

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Number of patients with glioma with an oligodendroglial component undergoing surgery where tissue sample is tested for 1p/19q within 21 days of surgery

Exclusions

None

Numerator Search Strategy

Fixed time period or point in time

Data Source

Electronic health/medical record

Paper medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Prescriptive Standard

Target: 90%

The tolerance within this target is designed to account for cases in which there is insufficient viable tissue for molecular analysis.

Evidence for Prescriptive Standard

NHS Scotland, Scottish Cancer Taskforce. Brain and central nervous system cancer clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland; 2016 Jan. 39 p. [24 references]

Identifying Information

Original Title

QPI 3 (i) – molecular analysis.

Measure Collection Name

Cancer Quality Performance Indicators (QPIs)

Measure Set Name

Brain and Central Nervous System Cancer

Submitter

NHS Scotland - National Government Agency [Non-U.S.]

Scottish Cancer Taskforce - National Government Agency [Non-U.S.]

Developer

NHS Scotland - National Government Agency [Non-U.S.]

Scottish Cancer Taskforce - National Government Agency [Non-U.S.]

Funding Source(s)

Scottish Government

Composition of the Group that Developed the Measure

Brain/Central Nervous System (CNS) Cancer QPI Development Group

Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2016 Jan

Measure Maintenance

The Cancer Quality Performance Indicators (QPIs) will be kept under regular review and be responsive to changes in clinical practice and emerging evidence.

Date of Next Anticipated Revision

2017 Aug

Measure Status

This is the current release of the measure.

Measure Availability

Source document available from the [Healthcare Improvement Scotland Web site](#) .

For more information, contact the Healthcare Improvement Scotland at Gyle Square, 1 South Gyle Crescent, Edinburgh, Scotland EH12 9EB; Phone: 0131 623 4300; E-mail: comments.his@nhs.net; Web site: www.healthcareimprovementscotland.org/ .

Companion Documents

The following is available:

NHS Scotland. National cancer quality performance indicators: overview of development process. Edinburgh (Scotland): NHS Scotland; 2012 Dec. 7 p. This document is available from the [Healthcare Improvement Scotland Web site](#) .

NQMC Status

This NQMC summary was completed by ECRI Institute on May 4, 2017. The information was verified by the measure developer on May 23, 2017.

Copyright Statement

No copyright restrictions apply.

Production

Source(s)

NHS Scotland, Scottish Cancer Taskforce. Brain and central nervous system cancer clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland; 2016 Jan. 39 p. [24 references]

Disclaimer

NQMC Disclaimer

The National Quality Measures Clearinghouse[®] (NQMC) does not develop, produce, approve, or endorse the measures represented on this site.

All measures summarized by NQMC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public and private organizations, other government agencies, health care organizations or plans, individuals, and similar entities.

Measures represented on the NQMC Web site are submitted by measure developers, and are screened solely to determine that they meet the [NQMC Inclusion Criteria](#).

NQMC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or its reliability and/or validity of the quality measures and related materials represented on this site. Moreover, the views and opinions of developers or authors of measures represented on this site do not necessarily state or reflect those of NQMC, AHRQ, or its contractor, ECRI Institute, and inclusion or hosting of measures in NQMC may not be used for advertising or commercial endorsement purposes. Readers with questions regarding measure content are directed to contact the measure developer.